

Work Order ID 134054

Thursday, June 25, 2015 2:25:34 PM

134054

ASAP

Page 1

Item ID: D3705-043 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Instrument Panel Weldment
 Start Date: 6/25/2015 Start Qty: 3.00 ***3*** Cust Item ID:
 Required Date: 6/25/2015 Req'd Qty: 3.00 ***3*** Customer:
 Reference:

Approvals: Process Plan: MLJ Date: JUN 25 2015 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3705	E

100 Weld per dwg A/R Aluminum rod Batch: M12399 0.00
100 Large Fab Memo 0.00
 Large Fab 1-Assemble and weld as per dwg D3705 per QSI004
 **** weld all around and buff weld smooth as indicate on dwg****

3 15-7-6

110 QC9- Inspect visual per QSI004- Fusion Welds 0.00
110 QC Memo 0.00
 Quality Control

3 15-07-06

120 QC5- Inspect part completeness to step on W/O 0.00
120 QC Memo 0.00
 Quality Control

(3)

DAS
38
9-89

JUL 06 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER :																			

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Chemical Conversion Coat per QSI005 4.1	0.00							
130									
HandFinish	Memo	0.00				3	0	15-7-6	DGL
Hand Finishing									
140	QC7-Inspect Chemical Conversion Coat	0.00							
140									
QC	Memo	0.00				3	0	15-7-7	PL
Quality Control									
150	Black Sandtex(Ref:4.3.5.7) per QSI005 4.3	0.00							
150									
Powdercoat	Memo	0.00				3	0	15-7-7	PL
Powder Coating	MASK INDICATED AREA PRIOR TO PAINT								
	START TIME: 1:20-320°								
	OVEN TEMPERATURE: 320°								
	FINISH TIME: 1:50								

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

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Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
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LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

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160	QC3- Inspect Part Finish	0.00			DAS 30 9-89	3			JUL 07 2015
160									
QC	Memo	0.00							
Quality Control									
170	Identify as per dwg & Stock Location: <u>GA</u>	0.00			DAS 30 9-89	3			JUL 07 2015
170									
Packaging	Memo	0.00							
Packaging									
180	QC21- Final Inspection - Work Order Release	0.00							JUL 07 2015
180									
QC	Memo	0.00							
Quality Control									

MLJ JUL 07 2015

DQA: _____ Date: _____



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Picklist Print

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Page 1

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134054

Parent Item: D3705-043

D3705-043

Parent Item Name: Instrument Panel Weldment

Start Date: 6/25/2015

Required Date: 6/25/2015

Start Qty: 3.00

Required Qty: 3.00

Comments: IPP Rev:A new issue 08-05-30 DD verified by:ec
 IPP Rev:B 09-01-09 rev.C as per dwg DD verified by:ec IPP Rev:C as
 per dwg RevD DD 10.04.27 verified by:EC IPP REV:D 12.12.03
 REV PE1 DD VERF:JLM IPP REV:E 13.01.15 AS PER
 DWG REV.E DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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D3705-1		Manufactured	No			100	Each	2.0000	1	3			
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D3705-1

Main Panel

**

EL 15-7-6

Location

Loc Qty

Loc Code

WA001

2

103564

2

115768 WF 15-6-30

D3705-3		Manufactured	No			100	Each	12.0000	1	3			
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D3705-3

Cover Plate

**

EL 15-6-30

Location

Loc Qty

Loc Code

WA001

12

108406

11

98299

1

2
1

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

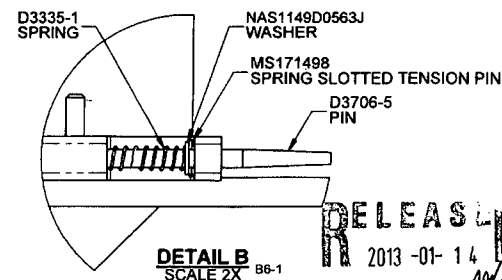
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							QC / QA Coordinator Approval																		
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : ☐																			

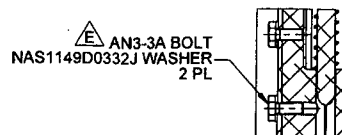
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ITEM	QTY -041	P/N	DESCRIPTION
	X	D3705-041	INSTRUMENT PANEL ASS'Y
1	1	D3335-1	SPRING
2	1	D3705-043	INSTRUMENT PANEL WELDMENT
3	1	D3705-5	ACCESS PANEL
4	1	D3706-041	LOCK BRACKET ASSEMBLY
5	1	D3706-5	PIN
6	2	D3707-3	MOUNTING LUG
7	2	AN3-3A	BOLT
8	4	AN526C1032R6	SCREW
9	1	NAS1149D0563J	WASHER (OR AN960JD516)
10	28	CR1122-3-02.5	RIVET
11	1	MS171498	SPRING SLOTTED TENSION PIN
12	14	MS21075L3	NUT PLATE
13	4	MS24693C272	SCREW
14	2	NAS1149D0332J	WASHER (OR AN960JD10L)



E	REVISED D3705-1/3 (NOW 0.75 TALLER - AFFECTS -1F/-3F); D3706-1/3 NOW D3706-041 AND BOLTED; ADD AN3-3A BOLT; NAS1149D0332J WASHER, D3706-041; 9.88 WAS 9.13 (ZN D1-3, B3-3, C7-A); 6.000 WAS 7.150 (ZN C4-6); 3.20 lbs WAS 3.00 lbs. REASON: CIR12-4/PAR12-188.	MB	12.11.30
D	ITEM 14 WAS AN960JD416 (ZN D3-1 AND C1-1). REASON: NCR#10-017.	MB	10.04.15
C	ADDED D3705-7/9-11 (SHEET 6); REMOVED MS35589-156 GROMMET; 9.31 AND 12.66 WERE 9.36 AND 12.61 (ZN B6-3); Ø 1.90 WAS 1.50 (ZN D5-4); ADDED Ø 0.204 HOLE (ZN D5-4); CR1122-3-02.5 WAS MS20426AD3-3. REASON: COMPLETED DESIGN OF FACE PLATES REQUIRED TO MOUNT INSTRUMENTS.	MB	08.11.20
B	ADDED MS35489-156; QTY 14 MS21075L3 WAS QTY 8; QTY 28 MS20426AD3-3 WAS QTY 16; MS171498 WAS TP-2; AN526C1032R6 WAS MS27059-1-08 & AN960JD10L (ZN D3-1); REDESIGNED D3705-1F FLAT PATTERN (ZN B6-3). REASON: GIVE MORE FLEXIBILITY TO CUSTOMER IN TERMS OF INSTRUMENT ARRANGEMENT	MB	08.08.07
A	NEW ISSUE	MB	08.05.28
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	12.11.30		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D3705 REV. E SHEET 1 OF 6 TITLE INSTRUMENT PANEL ASS'Y SCALE NTS COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL. NO PART OF THIS DOCUMENT IS TO BE REPRODUCED OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

SECTION A-A B7-1
SCALE 2X



SECTION G-G C4-1

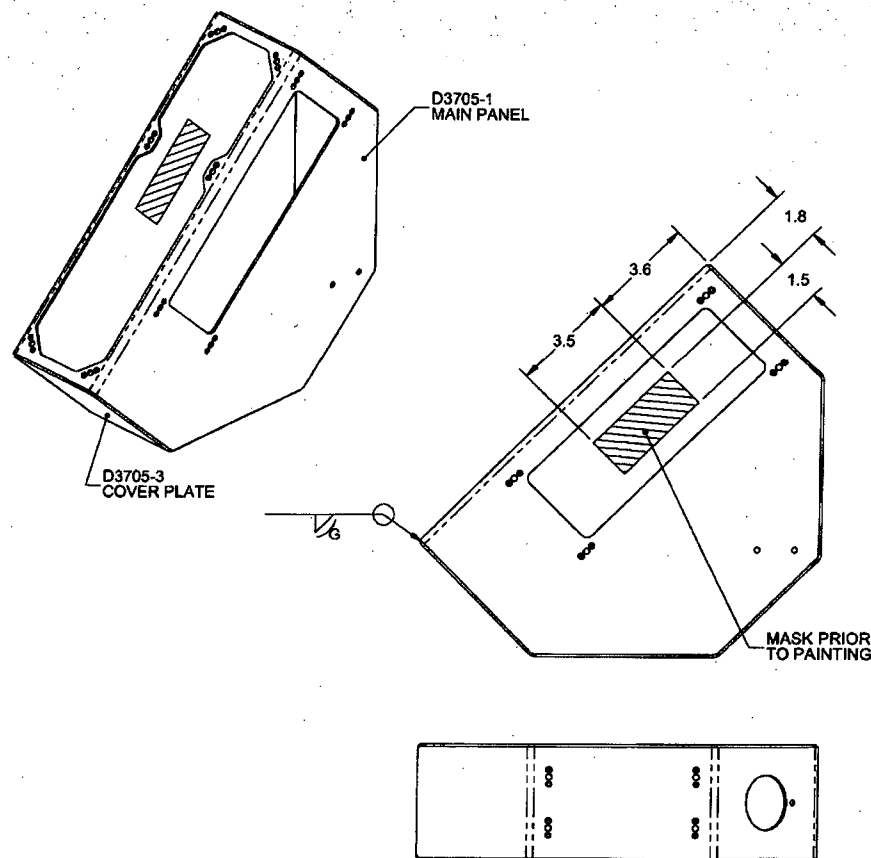
D3705-041 INSTRUMENT PANEL ASS'Y

D3705-041 NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N AND B/N PER DART QSI 044 6.1 (PERMANENT INK MARKER)
- 7) WEIGHT: 3.20 lbs

E

ITEM	-043 QTY.	P/N	DESCRIPTION
1	X	D3705-043	INSTRUMENT PANEL WELDMENT
3	1	D3705-1	MAIN PANEL
4	1	D3705-3	COVER PLATE



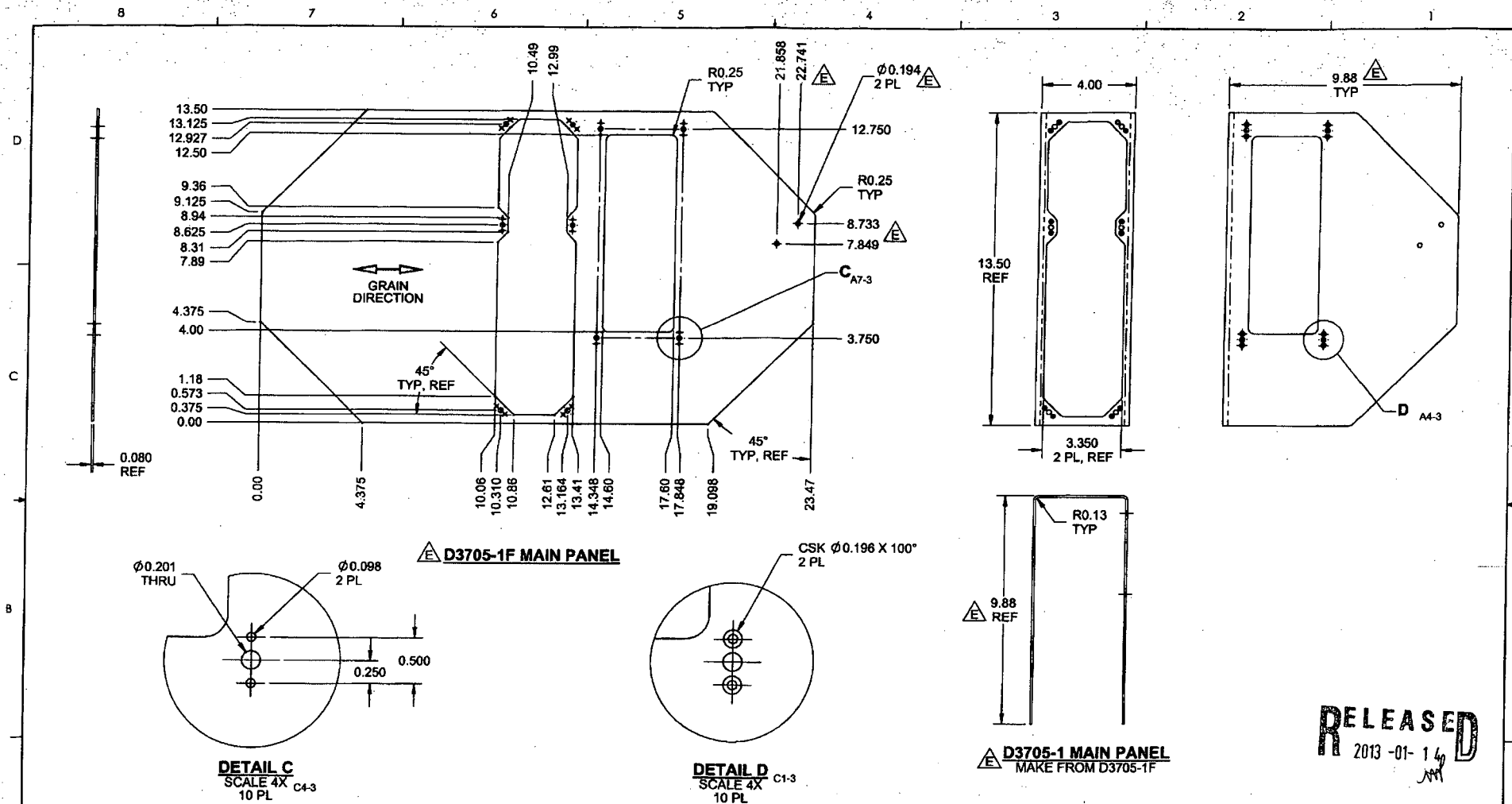
D3705-043 INSTRUMENT PANEL WELDMENT

D3705-043 NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT BLACK (4.3.5.7) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 3.20 lbs
- 8) WELDING: PER DART QSI 004

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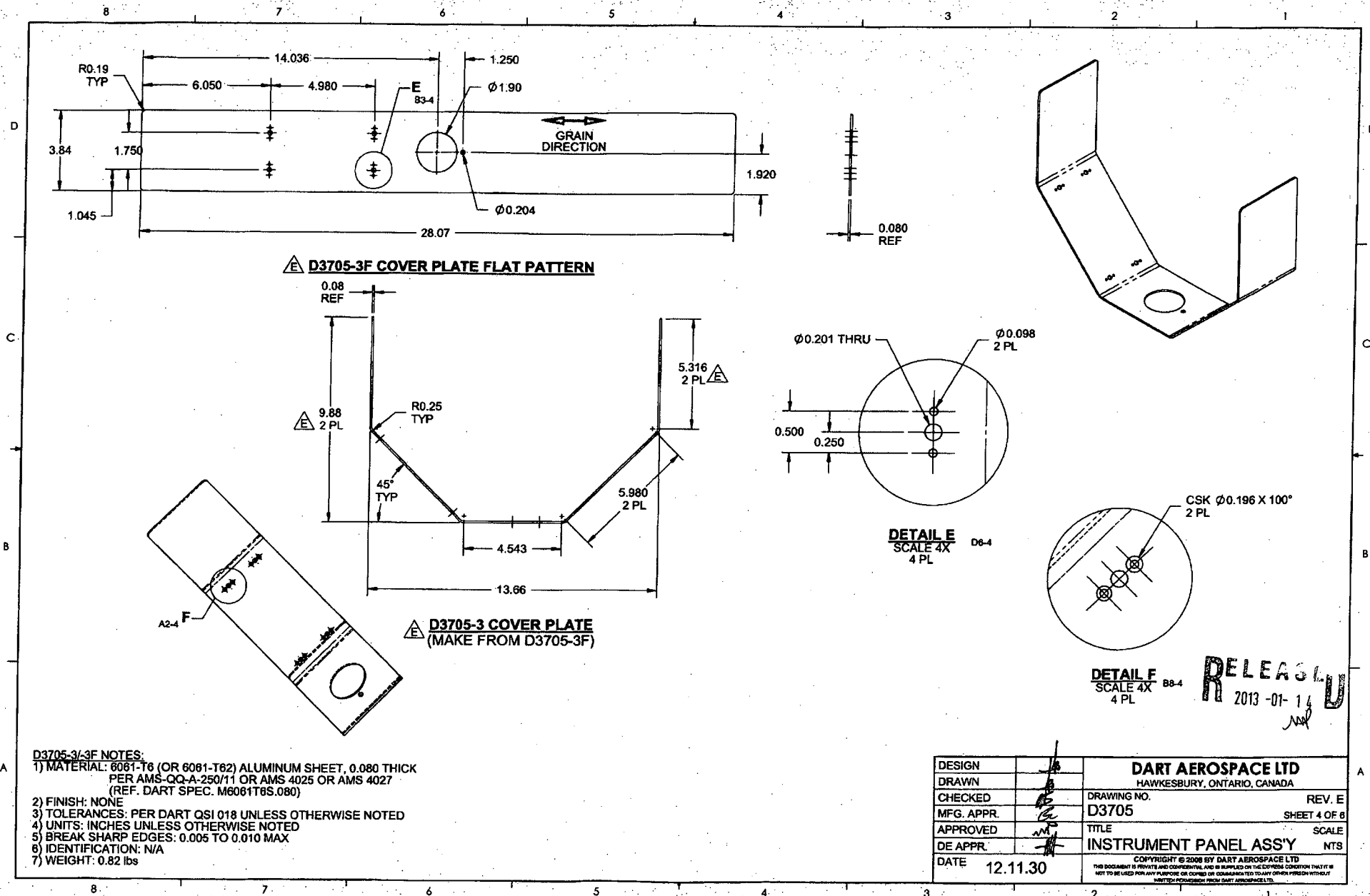


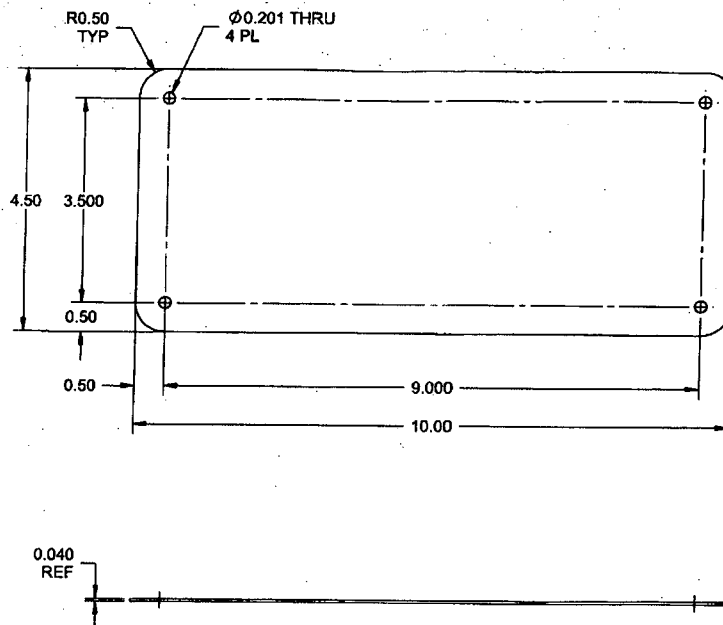
D3705-1/-1F NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T62) ALUMINUM SHEET, 0.080 THICK
PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027
(REF. DART SPEC. M6061T6S.080)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.65 lbs

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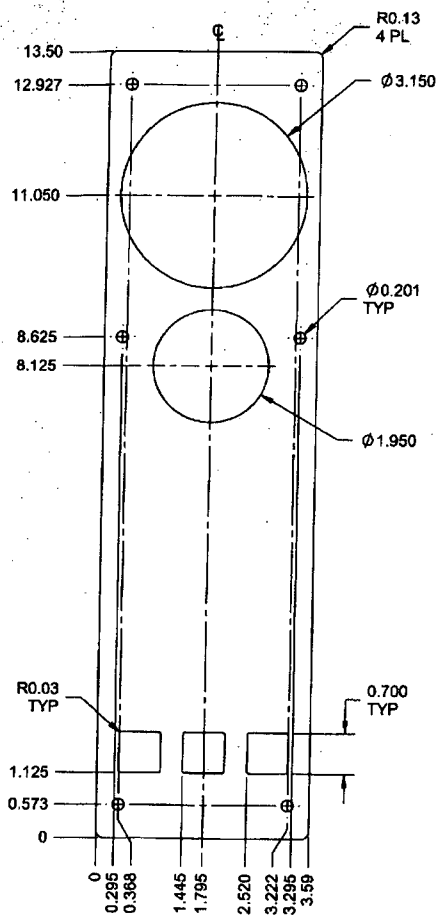
D3705-5 ACCESS PANEL

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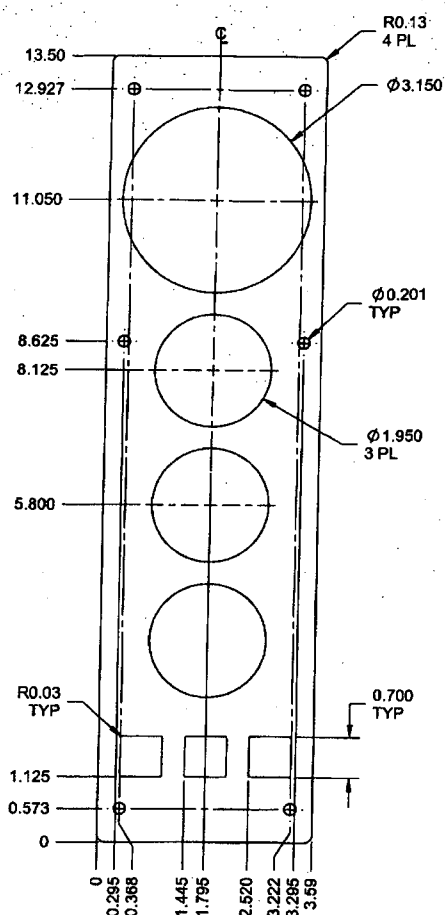
D3705-5 NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T62) ALUMINUM SHEET, 0.040 THICK
PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027
(REF. DART SPEC. M6061T6S.040)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT BLACK (4.3.5.7) PER DART QSI 005 4.3
- 4) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 7) IDENTIFICATION: IDENTIFY WITH DART P/N AND B/N PER DART QSI 044 6.1 (PERMANENT INK MARKER)
- 8) WEIGHT: 0.17 lbs

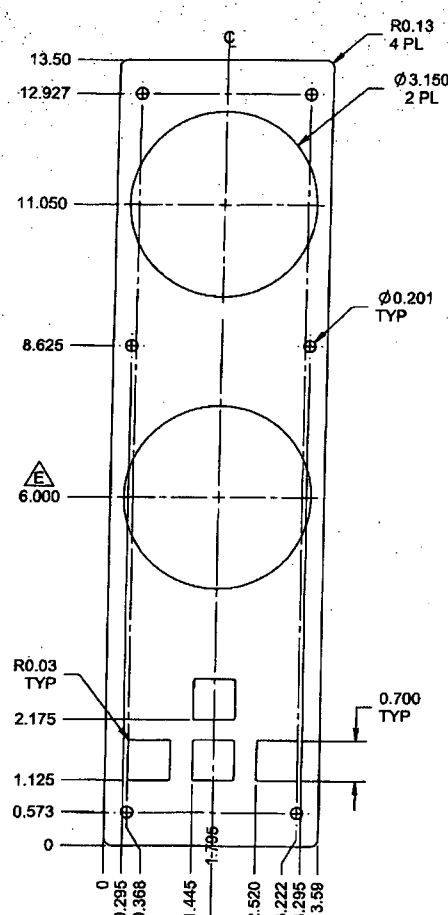
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D3705-7 FACE PLATE



D3705-9 FACE PLATE



D3705-11 FACE PLATE



**SIDE VIEW
TYP**

D3705-7/-9/-11 NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T62) ALUMINUM SHEET, 0.063 THICK
PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027
(REF. DART SPEC. M8081T6S.063)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT BLACK (4.3.5.7) PER DART QSI 005 4.3
- 4) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 7) IDENTIFICATION: IDENTIFY WITH DART P/N AND B/N PER DART QSI 044 6.1 (PERMANENT INK MARKER)
- 8) WEIGHT: D3705-7 = 0.22 lbs; D3705-9 = 0.18 lbs; D3705-11 = 0.19 lbs

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